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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/798,670	03/11/2004	Hsin-Chen Tsai	TS02-1054	6315

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EXAMINER

VON BUHR, MARIA N

ART UNIT PAPER NUMBER

2125

DATE MAILED: 05/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/798,670

Applicant(s)

TSAI, HSIN-CHEN

Examiner

Maria N. Von Buhr

Art Unit

2125

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 February 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-39 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-39 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Examiner acknowledges receipt of Applicant's response to the previous Office action, received 21 February 21, 2005; which amends claims 1-6, 8-12, 14, 16-22, 24-30, 32-36 and 38. Claims 1-39 remain pending in this application.
2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
3. In response to Applicant's amendment, the 35 U.S.C. §112, second paragraph, rejection of the claims is deemed to have been overcome and is, therefore, withdrawn.
4. Claims 24, 28 and 32 are objected to because, in claims 24 and 32, "is has" (line 15 and 16, respectively) should be corrected to -- has --, while in claim 28, -- lot -- should be inserted after "product" (line 3).
5. In response to Applicant's amendment and remarks, concerning the 35 U.S.C. §102(e) rejection of the claims, as being clearly anticipated by Fromherz et al. (U.S. Patent Application Publication No. 2004/0225394), Examiner notes the following:
 - a. As presented in the previous Office action, Fromherz et al. disclose "an automated manufacturing system having a number of modules with numerous alternative capabilities, a computer-controlled system provides for configuration-specific reprioritization of jobs. The computer-controlled system includes at least one system controller for planning and scheduling utilization of selected module capabilities in the production of jobs having not less than one work unit. Module capabilities include the relative costs of the module capabilities" (the abstract), wherein a rescheduling of jobs variably occurs based upon the priority of current and previous production lots, as instantly claimed, including "staging" of interrupted lots, by providing for resumption of processing of interrupted lots (see at least, Figures 2 and 3; paragraphs 4-7, 13, 14, 18, 19 and 24-26).
 - b. As per claims 1, 8, 16, 24 and 32, Applicant argues that "Fromherz includes vague and passing mention (for example, in paragraph 13) of the idea of interrupting a partially completed job within a system controller, and then later restarting that job. However, with reference to the drawings and the text describing them, it does not appear that Fromherz's preferred embodiment includes this capability, and Fromherz never provides any detailed description of how to interrupt and restart a job within a system controller," and relatedly argues that "Fromherz does not disclose any step-by-step procedure for effecting this, much less the specific step-by-step procedure that is expressly recited" in the

instant claims (both on page 18 of the instant response). This argument is not persuasive, because the *entire disclosure* of Fromherz is directed to interrupting partially completed jobs with a system controller, including a plurality of conditions under which jobs can interrupt other jobs, based upon their respective priorities. In other words, the sole purpose of the subject matter of the disclosure of Fromherz is to provide for such interrupting of processing. For example, see at least, paragraphs 18 and 24-26. Hence, Applicant's attempt to characterize such teaching as a "vague and passing mention" is disingenuous and incorrect.

c. Applicant also argues that the "PTO specifies in MPEP §2121.01 that it is not sufficient for an assertedly anticipating reference to merely mention the claimed subject matter, because it is a requirement under §102 that the reference must provide an 'enabling' disclosure of that subject matter" (pages 17-18 of the instant response), and relatedly argues that "it is one thing to propose a concept, but it is another to actually provide an enabling disclosure of one particular way to actually build a device embodying that concept" (page 18 of the instant response). This argument is not persuasive, because MPEP §2121 also states that "when the reference relied on expressly anticipates or makes obvious all of the elements of the claimed invention, the reference is presumed to be operable. Once such a reference is found, the burden is on Applicant to provide facts rebutting the presumption of operability. In re Sasse, 629 F.2d 675, 207 USPQ 107 (CCPA 1980)." See also MPEP §716.07, which states in part that "every patent is presumed valid (35 U.S.C. 282), and ... that presumption includes the presumption of operability (Metropolitan Eng. Co. v. Coe, 78 F.2d 199, 25 USPQ 216 (D.C.Cir. 1935))." Furthermore, Applicant has not referred to MPEP §2121.01 in its entirety, wherein it states that the "disclosure in an assertedly anticipating reference must provide an enabling disclosure of the desired subject matter; mere naming or description of the subject matter is insufficient, *if it cannot be produced without undue experimentation*" (emphasis added). In this regard, as noted above, the *entire disclosure* of Fromherz is directed to interrupting partially completed jobs with the system controller, including a plurality of conditions under which jobs can interrupt other jobs, based upon their respective priorities. One of ordinary skill in the art would easily, without undue experimentation, have provided for a sequence of comparison steps, specific to a particular implementation, in order to accomplish this result. Accordingly, Applicant has not met the burden of proof referred to in MPEP §2121.

d. Applicant further argues that "Fromherz mentions in paragraph 13 that some jobs can be interrupted and restarted correctly, and that others cannot, but Fromherz fails to provide any detail about how an automated system would decide which jobs can be interrupted and restarted and which cannot," and relatedly argues that "Fromherz fails to provide an enabling disclosure of even one way to distinguish jobs that can be interrupted from jobs that cannot, and to then interrupt and restart selected jobs without

error” (page 18 of the instant response). This argument is not persuasive, because no such limitations, concerning any determining of which jobs can be interrupted nor whether jobs are interrupted and restarted *correctly* or *without error* (emphasis added), exists in the instant claims. Therefore, it is irrelevant whether the reference includes those features or not.

e. As per claims 7, 15, 23, 31 and 39, Applicant argues that “Fromherz does not disclose and “integrated circuit fabrication equipment” nor any “integrated circuit substrates.” This argument is not persuasive, since Fromherz is clearly directed generically to “the control and management of automated manufacturing systems” (paragraph 3), and integrated circuit fabrication facilities are an extremely well-known type of “automated manufacturing system.”

f. Applicant has provided no further arguments concerning any of the other dependent claims. Hence these claims are deemed to stand or fall with their parent claims, as addressed above.

g. Accordingly, claims 1-39 stand rejected under 35 U.S.C. §102(e), as being clearly anticipated by Fromherz et al. (U.S. Patent Application Publication No. 2004/0225394).

6. In response to Applicant’s amendment and remarks, concerning the 35 U.S.C. §102(b) rejection of the claims, as being clearly anticipated by Kashiya et al. (U.S. Patent No. 6,400,999), Examiner notes the following:

a. As presented in the previous Office action, Kashiya et al. disclose a “production system wherein product agents are provided for products on a one-to-one basis and machine agent are provided for manufacturing equipment on a one-to-one basis, with the product agents and machine agents coordinating with each other to select a manufacturing equipment and cause manufacturing work to be done thereby; wherein the order of product manufacturing is changed depending on the priority of the product in the production system” (the abstract), wherein production lots are rescheduled based upon priority, as instantly claimed, including “staging” of interrupted lots, by storing relevant data pertaining to the processed lot, in order to allow for resumption of lot processing (see at least, Figs. 14-15, with associated text).

b. As per claims 1, 8, 16, 24 and 32, Applicant argues that “the Office Action refers to Figures 14-15 of Kashiya and the associated text, and then asserts that this portion of Kashiya discloses ‘staging’ of interrupted lots, by storing relevant data pertaining to the processed lot, in order to allow for resumption of lot processing. However, and contrary to the assertions in the Office Action, words such as ‘staging,’ ‘interrupted’ and ‘resumption’ do not appear anywhere in Kashiya, much less in the indicated portion thereof. In fact, Figures 14-15 and the associated text do not appear to disclose

anything that even remotely resembles interruption and resumption of a production lot ... Kashiyama does not appear to even mention interrupting and restarting a production lot” (pages 19-20 of the instant response). This argument is not persuasive. There is no requirement, in order for a reference to be anticipatory, that the reference utilize the exact same terminology, as used by Applicant, to describe the inventive concept. In this regard, the entire purpose of the disclosure of Kashiyama et al., as stated in the abstract, is to provide a “production system ... wherein the order of product manufacturing is changed depending on the priority of the product in the production system.” In order to accomplish this, Kashiyama et al. teach “reserving” manufacturing resources, analogous to the instantly claimed “staging,” “replacing” and “over-taking” production in response to various priority conditions, analogous to the instantly claimed “interrupting,” and continued production according to the altered reservations, analogous to the instantly claimed “resuming” (for example, see at least, col. 9, line 17 - col. 11, line 15). In other words, Kashiyama et al. utilize well-known language in the art, which one having ordinary skill in the art would have easily recognized as referring to the same operational concepts as the instantly claimed terminology “staging,” “interrupting” and “resuming,” and hence, clearly is directed to the interruption and resumption of product lot manufacturing.

c. Also, Applicant again argues that “as noted earlier, the PTO specifies in MPEP §2121.01 that it is not sufficient for an assertedly anticipating reference to merely mention the claimed subject matter, because it is a requirement under §102 that the reference must provide an ‘enabling’ disclosure of that subject matter” (page 19 of the instant response), and relatedly argues that “Kashiyama does not appear to ... provide an enabling disclosure thereof, still less a disclosure of precisely the same specific sequence of steps that is recited in Applicant’s Claim 1” (page 20 of the instant response). This argument is also not persuasive, because as already noted above, MPEP §2121 also states that “when the reference relied on expressly anticipates or makes obvious all of the elements of the claimed invention, the reference is presumed to be operable. Once such a reference is found, the burden is on Applicant to provide facts rebutting the presumption of operability. In re Sasse, 629 F.2d 675, 207 USPQ 107 (CCPA 1980).” See also MPEP §716.07, which states in part that “every patent is presumed valid (35 U.S.C. 282), and ... that presumption includes the presumption of operability (Metropolitan Eng. Co. v. Coe, 78 F.2d 199, 25 USPQ 216 (D.C.Cir. 1935).” Furthermore, Applicant has not referred to MPEP §2121.01 in its entirety, wherein it states that the “disclosure in an assertedly anticipating reference must provide an enabling disclosure of the desired subject matter; mere naming or description of the subject matter is insufficient, *if it cannot be produced without undue experimentation*” (emphasis added). In this regard, as noted above, the *entire disclosure* of Kashiyama et al. is directed to interrupting manufacturing jobs with a system controller, including a plurality of conditions under which jobs can interrupt other jobs, based

upon their respective priorities. One of ordinary skill in the art would easily, without undue experimentation, have provided for a sequence of comparison steps, specific to a particular implementation, in order to accomplish this result. Accordingly, Applicant has not met the burden of proof referred to in MPEP §2121.

d. As per claims 7, 15, 23, 31 and 39, Applicant argues that Kashiyama does not disclose and "integrated circuit fabrication equipment" nor any "integrated circuit substrates." This argument is not persuasive, since Kashiyama is clearly directed generically to the control and management of an automated production system (see at least, the abstract; col. 1, lines 8-54), and integrated circuit fabrication facilities are an extremely well-known type of automated production system.

e. Applicant has provided no further arguments concerning any of the other dependent claims. Hence these claims are deemed to stand or fall with their parent claims, as addressed above.

f. Accordingly, claims 1-39 stand rejected under 35 U.S.C. §102(b), as being clearly anticipated by Kashiyama et al. (U.S. Patent No. 6,400,999).


7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR §1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR §1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Maria N. Von Buhr whose telephone number is 571-272-3755. The examiner can normally be reached on M-F (9am-5pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Leo Picard can be reached on 571-272-3749. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


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